CLAIMS

1. A method for carrying out channel equalization in a radio receiver comprising:

estimating impulse response,

determining noise power by estimating a covariance matrix of the noise contained in a received signal before prefiltering,

calculating tap coefficients of prefilters and an equalizer,

determining the noise power after prefiltering by estimating a noise variance, and

weighting input signals of the channel equalizer by weighting coefficients obtained by estimating the noise variance.

2. A method as claimed in claim 1, wherein the signals to be weighted are the impulse response corrected by means of a noise covariance matrix estimate and the received prefiltered signals.

3. A method as claimed in claim 1, wherein the signals supplied to the channel equalizer are weighted by weighting coefficients that are determined taking the biasing in the noise power estimate into account.

4. A method as claimed in claim 1, wherein channel equalization is carried out using a channel equalizer based on the Viterbi algorithm.

5. A method as claimed in claim 1, wherein channel equalization is carried out using a decision feedback channel equalizer.

6. A radio receiver comprising:

means for estimating an impulse response,

means for determining noise power of a received signal by estimating a covariance matrix of the noise contained in the received signal before prefiltering,

means for calculating tap coefficients of prefilters and a channel equalizer,

means for determining the noise power after prefiltering by estimating a noise variance, and

means for weighting input signals of the channel equalizer by weighting coefficients obtained from the noise variance estimation.

7. A radio receiver as claimed in claim 6, wherein the signals to be weighted are the impulse response corrected by means of a noise covariance matrix estimate and the received prefiltered signals.

8. A radio receiver as claimed in claim 6, the receiver comprises means for weighting the signals supplied to the channel equalizer by weighting coefficients that are determined taking the biasing in the noise power estimate into account.

9. A radio receiver as claimed in claim 6, the receiver comprises means for carrying out channel equalization by a channel equalizer based on the Viterbi algorithm.

10. A radio receiver as claimed in claim 6, the receiver comprises means for carrying out channel equalization using a decision feedback channel equalizer.